MASSACHUSETTS ELECTRIC COMPANY/NANTUCKET ELECTRIC COMPANY

Terms & Conditions for Suppliers

Parties:

Customer

The Customer is the end user which takes electric service and utilizes it at his/her home or facility. The Customer must be a registered Customer of record for Massachusetts Electric Company or Nantucket Electric Company (hereinafter, Mass. Electric). Each Customer is identified by a number assigned by Mass. Electric. The number, which is unique to a Customer's home, facility or portion applicable is referred to as Customer Delivery Point, permanently identified by a "LOC ID" number.

For purposes of billing and financial responsibility each Customer Delivery Point will also be identified as an Account by Mass. Electric and assigned an Account number.

A Customer will select one registered Supplier, or authorize an Aggregator¹ (hereinafter, Supplier) to make the selection for them if aggregation becomes an available opportunity, at any given time.

The supply of electric service shall be in accordance with the provisions of these Terms and Conditions. Customers can choose only Suppliers who meet the terms described below and are registered with the Department of Public Utilities (DPU).

Distribution Company

Mass. Electric is responsible for providing local distribution services from the Transmission Delivery Point(s), as defined within these Terms and Conditions, to the Customer Delivery Point(s) which shall be the meter point for each Account.

Mass. Electric will:

- arrange for network transmission service on behalf of each Customer to each Customer Delivery Point;
- deliver power over distribution facilities to each Customer Delivery Point;
- provide customer service and support;
- respond to service interruptions or power quality problems;

¹ An Aggregator is a person or persons who are authorized by Customers to arrange for electricity supply on Customers; behalf. Typically, Aggregators group Customers together to be able to negotiate lower prices from Suppliers based upon the group rather than individual Customer energy usage.

- handle connections and terminations;
- read meters;
- submit bills for local distribution services and, if contracted by the Customer's Supplier, for generation services;
- address billing inquiries for the local distribution services bill portion and, if contracted by the Customer's Supplier, the generation services portion;
- answer general questions about local distribution service; and
- report Suppliers' loads, including losses and Metering Voltage Adjustment Factor, to the New England Power Pool (NEPOOL).

Mass. Electric will also provide basic or safety net energy service for Customers who are not on standard offer service and do not have a registered all-requirements Supplier, or the Customer's registered Supplier fails to provide sufficient generation service to meet the Customer's entire requirements. Basic service will be arranged by Mass. Electric through competitive bidding or spot market purchases.

Supplier

Supplier is the generation service provider for the electric needs of each Customer Account, taken individually. Supplier shall be responsible for providing firm, all-requirements service to meet the needs of each Account it is serving and to deliver the associated capacity and energy to a point or points on New England Power Company's (NEP) transmission system, as well as provide any and all necessary installed and operating reserves required to serve each Account's load.

Each Supplier must meet the registration requirements established by law, be a member of NEPOOL and have an own-load dispatch established within the NEPOOL billing system² or have an agreement in place with a NEPOOL member whereby the NEPOOL member agrees to include the load to be served by the Supplier in its own-load dispatch. All Suppliers shall meet the requirements of these Terms and Conditions.

Once a Customer has indicated their choice of Supplier, the Customer must provide Mass. Electric with the following information at least 30 days prior to the commencement of service by a new Supplier:

^{2.} Membership in NEPOOL is open to any person or organization engaged in the electric utility business (the generation and/or transmission and/or distribution of electricity for consumption by the public, or the purchase, as principal or broker, of electric energy and/or capacity for resale at wholesale), whether in the United States of America or Canada or a state or province or a political subdivision thereof or a duly established agency of any of them, a private corporation, a partnership, an individual, an electric cooperative or any other person or organization recognized in law as capable of owning property and contracting with respect thereto. No person or organization shall be deemed to be eligible for membership if the generation, transmission, or distribution of electricity by such person or organization is primarily conducted to provide electricity for consumption by such person or organization or an affiliated person or organization.

- LOC ID number or numbers where service will be provided;
- name, street, address and phone number of the Supplier;
- starting date of service (coincident with the Customer's normal cycle meter read date).

Suppliers shall provide the same information to Mass. Electric, along with the billing selection for generation service (provided directly by Supplier or through Mass. Electric) and the name of the NEPOOL participant in whose NEPOOL Own-Load dispatch the Supplier's loads are to be included. Service will begin if both Customer and Supplier notifications match . If the notifications do not match , Mass. Electric will notify both Customer and Supplier. Customer and Supplier shall resolve any discrepancies and resubmit separate notifications to Mass. Electric according to procedures detailed in the flowcharts in Attachment 1.

All Customers confirmed by Suppliers will be identified by Mass. Electric in its customer information system and assigned to their respective Suppliers. Supplier changes will be made to coincide with the Customers' normal cycle meter read dates. Customers changing Suppliers will be charged an administrative fee of \$5 (Five Dollars) by Mass. Electric. Mass. Electric will waive this fee for Customer's moving from standard offer service to a Supplier.

The Customer and/or Supplier must inform Mass. Electric of any desired changes in Supplier service five (5) business days prior to the scheduled meter read date on which the change will become effective. Notification must be done in accordance with the procedures identified in these Terms and Conditions and the attached flowcharts (see Attachment 1).

To compensate for system losses and Company use requirements, Mass. Electric requires Suppliers to provide an excess quantity of electricity and associated ancillary services. The percentages above the quantities actually delivered to said Supplier's retail Customers in each hour of the billing period, as measured by the Company's distribution metering equipment, shall be specified in a filing that Mass. Electric will make with the Department by July 1, 1997.

Suppliers providing generation service to Mass. Electric local distribution service Customers from outside of NEPOOL will be responsible for any and all losses incurred on other transmission systems, which may also include losses on facilities linking generation to NEPOOL PTF facilities.

Suppliers will be obligated to provide services in accordance with these Terms and Conditions.

Billing:

Mass. Electric will issue a bill for local distribution service.

Supplier shall be responsible for billing Customer for the cost of generation service provided by Supplier and collection of amounts due to Supplier from Customer. To accomplish this, Mass. Electric will read meters on a monthly cycle and provide to Supplier(s) on the next business day after the meter read; an electronic file containing the applicable billing determinants and records of billing data for each Account. The proposed record format is detailed in Appendix A, Section I. All electronic files will be transmitted using the Advantis Value Added Network (VAN) or in the case of payment information, via Electronic Data Interchange (EDI).

Mass. Electric offers the following standard and optional billing services to Suppliers:

1) Standard Billing Service - Passthru:

For all Suppliers serving Mass. Electric local distribution service Customers, Mass. Electric will electronically transmit to the Supplier Customer usage/demand information obtained via meter reads to the Supplier's VAN of choice. The record format is detailed in Appendix A, Section I., "Customer Usage Record Format". With this billing option, Suppliers would use this data to calculate Customer bills and mail a separate Supplier bill to the Customer.

2) Optional Billing Service - Complete:

With this option, Suppliers would provide Mass. Electric with rates to be implemented for designated Mass. Electric customer classes. Mass. Electric would use the supplied rates to calculate the Supplier portion of Customer bills, then integrate this billing with the Transmission, Distribution and Access Charge components in a single mailing to the Customer.

Mass. Electric offers this billing service for set fees identified in the following section "Charges for Service," if the Supplier adheres to the following Customer classes and rate/pricing structure:

Rate Class Structure	Pricing Structure
Residential Residential - Time of Use Residential - High Use (>25K kWh year)	Flat Energy On/Off Peak Energy Flat Energy
Rate Class Structure	Pricing Structure
Residential - Aggregated Small C&I - Energy Only	Flat Energy Flat Energy

Small C&I - Demand Large C&I - TOU/Demand Flat Energy & Demand TOU Energy & Demand

If Suppliers request a different Customer classes or a rate structure other than indicated above, Mass. Electric will consider accommodating changes to the billing system. The Supplier will be responsible for any costs incurred with making the designated changes, which will be quoted by Mass. Electric to the Supplier prior to the start of programming.

Upon receipt of Customer payments, Mass. Electric will forward to Supplier all revenue from Supplier sales which have been received and recorded by midnight of that business day, e.g., payments received on Monday normally will be forwarded to the Supplier by midnight on Monday. Payments to Suppliers will be made in a lump sum for all Customer revenue due the Supplier for a given day. These lump sum Supplier payments will be made via an Automated Clearing House (ACH) credit to a pre-determined Supplier bank account. The payment to the Supplier will be accompanied by an electronic file which provides a detailed payment summary for each individual Customer. The record format, to be transmitted as EDI Transaction Set 820, is detailed in Appendix A, Section III, "Customer Payment Record Format".

Existing Mass. Electric service fees, such as interest charges for unpaid balances, bad check charges, etc., shall remain in effect and be assessed, as applicable, to each Account according to the Mass. Electric Retail Terms and Conditions, applicable to all Customers. The cash posting sequence for customer payments to Accounts is detailed in Appendix A, Section IV, "Supplier Cash Posting Sequence".

Summary Billing:

Mass. Electric offers qualified Customers with multiple electric service Accounts a summary billing option. Designed to consolidate multiple individual billings on a single bill format, this optional service allows Customers to pay numerous accounts with one check.

Customer Service Option:

For Suppliers who elect the complete billing service, Mass. Electric will offer optional Customer services.

These services include, but are not limited to, providing customer service representatives to answer phone calls from a Supplier's Customers. Mass. Electric will provide any Supplier contracting for optional customer service with a unique toll free phone number which will be printed on the Supplier portion of the Customer's bill.

Telephone calls will be answered using the appropriate Supplier's name and operators will be able to respond to a wide variety of call types.

Pricing for this optional service will be customized to the Supplier's needs, and is dependent on the specific Customer services required by the Supplier, the volume of Customer calls, requested coverage hours and/or the specific number of customer service representatives requested.

Definition of Standard Units of Service:

Billing Demand:

Billing Demand for Small C&I Demand Accounts shall be the greater of:

- 1) The greatest fifteen-minute peak occurring during all hours, Peak and Off-Peak, within such a month as measured in kilowatts,
- 2) 90% of the greatest fifteen-minute peak occurring during all hours, Peak and Off-Peak, of such month as measured in kilovolt-amperes,
- 3) 5 kilowatts.

Billing Demand for Large C&I-TOU / Demand Accounts shall be the greater of:

- 1) The greatest fifteen minute peak occurring during the Peak Hours period within such a month as measured in kilowatts.
- 2) 90% of the greatest fifteen-month peak occurring during the Peak Hours period of such month as measured in kilovolt amperes.

On-Peak / Off-Peak Period Definitions

The on-peak and off-peak periods shall be as defined in Mass. Electric's applicable tariff on file with the DPU. At the present time, on-peak periods are from 8:00 AM to 9:00 PM, Monday through Friday, except holidays. Off-peak periods are from 9:00 PM to 8:00 AM Monday through Friday and all day on Saturday, Sundays and holidays. Holidays are New Year's Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day and Christmas Day.

Suppliers may define on-peak and off-peak periods differently from those above; however, they will be required to make special metering arrangements with Mass. Electric to reflect different on and off-peak definitions. Any costs incurred to provide the special metering arrangements shall be borne by the Supplier.

Charges for Service - Supplier(s):

The following standard and optional monthly charges will apply to Suppliers:

A. Charges for Billing of Supplier Use:

Rate Class	Billing Costs (per Account F (See Notes)	Record, per Month)
R-1, R-2	\$1.27	
R-4	\$1.26	
G-1	\$1.49	
G-2	\$1.57	
G-3	\$ <u>TBD</u>	

Notes:

- 1) This cost will be charged to all Suppliers who elect the *Complete* optional billing service. All costs above are per Customer Account per month.
- 2) Any Supplier choosing the Complete billing option will receive a monthly minimum charge of \$500 per month.

B. Electronic Transmission Cost (per Account record):

• Advantis	VAN Member:	Prime Time	Non-Prime Time
a)	Customer Usage Complete, Passthru	\$ 0.0240	\$ 0.0120
b)	Supplier Billing Complete Only	\$ 0.0130	\$ 0.0065
c)	Supplier Payment	\$ 0.0110	\$ 0.0055

Complete Only

• *Not - Advantis VAN Member:*

a)	Customer Usage	\$ 0.0480	\$ 0.0240
b)	Supplier Billing	\$ 0.0260	\$ 0.0130
c)	Supplier Payment	\$ 0.0220	\$ 0.0110

Notes: 1. All costs will be incurred twice, once to transmit the information, and again to retrieve the information. Therefore the applicable costs above should be doubled to arrive at total cost. All transmission costs are per record. Maximum one record type for each Account per month.

- 2. Transmission charges will vary based on time of day. Advantis defines Prime Time as 8:00 am 8:00 pm EST, Monday-Friday. All other times are Non-Prime.
- 3. Advantis rates are subject to change by IBM at any time and will be passed on to Suppliers at that time.

Metering:

Each Account will be metered such that the loads can be reported to NEPOOL for inclusion in the Supplier's or the Supplier's wholesale provider's own-load dispatch.

Should a different meter be requested by a Supplier for an Account, Mass. Electric will provide, install, test and maintain the required meter provided that it meets the established meter standards and is approved by Mass. Electric. The Customer or Supplier shall bear the cost of providing, installing and maintaining the meter. Upon installation the meter shall become the property of Mass. Electric.

Mass. Electric will complete the installation of a meter, if available, within 30 days of receiving a written request from the Customer or Supplier. Upon installation, Mass. Electric shall send a bill to the Customer or Supplier.

Determination of Hourly Loads:

For each Supplier, hourly loads for each day will be estimated and reported daily to NEPOOL for inclusion in the Supplier's own-load dispatch. These hourly load estimates will be based upon average load profiles developed for each Customer class of Mass. Electric. The total hourly loads will be determined in accordance with the appropriate hourly load for Mass. Electric.

To refine the estimates of the Suppliers' monthly kWh which result from the estimated hourly loads, monthly calculation will be performed to reconcile the original estimate of Supplier loads to actual Customer usage based on meter reads.

- A. Select Load Profiles for Daily Estimation Process:
 - 1) Purpose:
 - a) Select a load profile for each customer class for use in daily Supplier load estimation process.
 - 2) Inputs
 - a) Load profiles from load research database:

Each Customer in Mass. Electric territory will be assigned a load profile on a daily basis according to their rate class. The class load profiles will be taken from the load research database called the LODESTAR Statistical Load Database (SLDB). The SLDB stores rate class average load profiles for every day of the year. The rate class average load profiles are based upon the data from statistically designed rate class samples and calculated using ratio estimation.

Load profiles for Customers in the Mass. Electric rate classes will come directly from the statistical samples designed for those rate classes.

- b) Identify date from the 13-month historical period which best matches the previous day's characteristics.
- 3) Process
 - a) Extract load profiles for rate classes from the load research databases (input A(2)(a)) for the day identified in input A(2)(b).
- 4) Output
 - a) One 24-hour load profile for each class for the previous day. These load profiles are inputs to the tasks in Sections C and E below.
- **B.** Determine Customer Load Adjustment Factors:
 - 1) Purpose

a) To calculate a factor for each Customer of Mass. Electric which accounts for the differences between individual Customers' loads and their class average loads, losses and primary metering configurations.

2) Sources

- a) Customer monthly billed kWh data from Mass. Electric's Customer Information System (CIS) for the past 13 months.
- b) Billing cycle, rate class code, and distribution company code, meter adjustment factor. These data will be stored in a table which is created from CIS.
- c) The Loss Adjustment Factors will be developed and filed with the Department.

3) Process

a) The average kWh for a class will be calculated by summing all of the current metered kWh for all Customers in that class and dividing by the number of Customers in that class.

kWh_{ch} = Sum of all Customers' current metered kWh for Customers in rate class h / Number of Customers in class h

 kWh_{ph} = Sum of kWh of all Customers' metered kWh in same month last year in rate class h / Number of Customers in class h

b) Calculate a Usage Factor (UF) for each Customer as follows:

$$UF = (kWh_{ci} + kWh_{pi})/(kWh_{ch} + kWh_{ph})$$

Where:

 $kWh_{ci} = kWh$ in current month_c for individual Customer_i

 $kWh_{pi} = kWh$ in same month of prior year, for individual Customer,

 kWh_{ch} = average kWh of $class_h$ in current month_c (Step B(3)(a))

 kWh_{ph} = average kWh of class_h in same month of prior year_p (Step B(3)(a))

Exceptions:

If a Customer is missing the prior year's billing, his UF is the simplified version:

 $UF(simplified) = kWh_{ci}/kWh_{ch}$.

If a Customer is missing data required for both the regular and the simplified UF, his UF = 1.

c) For every Customer, a Load Adjustment Factor (LAF) will be calculated monthly, as follows:

LAF = Meter Adjustment Factor * Loss Adjustment Factor * Usage Factor

- 4) Output:
 - a) Customer Load Adjustment Factors are passed to Task C and Task E.
 - b) The factors listed in B(2)(b) and B(2)(c) and the Usage Factors from step B(3)(b) for every Customer for every month will be stored in a data set.

C. Estimate Preliminary Supplier Load Profiles for Previous Day:

- 1) Purpose
 - a) To develop preliminary estimates of hourly load profiles for the previous day for each Supplier. These estimates will be reconciled to the appropriate Mass. Electric loads in Task D.
- 2) Inputs
 - a) Average class load profiles from Task A.
 - b) Customers' Load Adjustment Factors (LAF) from Task B, identified by Supplier, and Customer class.
 - c) Supplier identification for each Customer.
- 3) Process

- a) Each day the Customers' LAF's are summed by, Suppliers and classes. The results comprise one total factor for each combination of Supplier and class.
- b) The average class load profiles (input C(2)(a) are multiplied by the total factors from C(3)(a), resulting in class total load profiles for each Supplier. The class total load profiles are then summed to arrive at a total load profile for each Supplier within Mass. Electric.

4) Output

a) Preliminary total load profile for each Supplier.

D. Create Adjusted Estimates of Supplier Load Profiles:

- 1) Purpose
 - a) To adjust preliminary estimates of Supplier load profiles developed in Task C so that the sum of the Supplier loads equals the hourly metered Mass. Electric loads collected each day.
- 2) Inputs
 - a) Hourly loads from NEP billing meters from previous day. These data are collected via phone lines through the MV-90 system.
 - b) The total Supplier load profiles from Task C.

3) Process

- a) Aggregate total Supplier load profiles (input D(2)(b)) across Suppliers within Mass. Electric, resulting in a total estimated load profile for Mass. Electric.
- b) Subtract estimated load profiles (result of step D(3)(a)) from hourly metered loads (input D(2)(a)).
- c) In each hour, allocate this total difference (result of D(3)(b)) to the Suppliers' loads in proportion to the preliminary estimates of the Suppliers' loads in that hour. This calculation results in an adjusted total Supplier load profile within Mass. Electric.

4) Output

a. Total load profile for each Supplier for the previous day (result of step D(3)(c)).

E. Reconcile Monthly kWh by Supplier:

1) Purpose

This step refines estimates of the Suppliers' monthly kWh with information available from Customers' monthly meter readings.
 This step will lag the daily estimation process by at least a month.

2) Inputs

- a) Daily load profiles for each class. These were developed in Task
 A, based on data from the historical period, and were stored with the current periods' dates.
- b) Customer Usage Factors from the CIS database developed in Task B.
- c) Customers' monthly kWh from meter readings.
- d) Daily kWh estimates by Supplier from Task C, summed over calendar month.
- e) Historical proxy dates for all dates in month.
- f) Date ranges for all billing cycles.

3) Process

- a) Sum the Customer Usage Factors (input E(2)(b)) by cycle, class and Supplier.
- b) From the monthly meter readings (input E(2)(c)), calculate the total monthly billed kWh by Supplier and billing cycle.
- c) For each billing cycle and Supplier, estimate the total monthly kWh using inputs E(2)(a) and the results of step E(3)(a). Sum across the hours in each billing cycle to estimate monthly kWh for each Supplier and billing cycle.

- d) Perform steps E(3)(a), E(3)(b) and E(3)(c) for all cycles in a month, calculate the total monthly kWh from each process by Supplier, then calculate the ratio between the two totals by Supplier.
- e) Multiply each Supplier's estimated monthly kWh (from input E(2)(d)) by the ratio from step E(3)(d) to obtain reconciled estimates of each Supplier's monthly kWh.
- f) Sum results of step E(3)(e) over Suppliers, then compare to the total of all Supplier load from Task D. Adjust Supplier loads again, if necessary (proportionally).
- g) Compare the resulting total kWh from step E(3)(f) by Supplier to the original estimates from Task D to derive the kWh adjustment amount for each Supplier.

4) Output

a) A report indicating the kWh adjustment amounts by Supplier.

NEPOOL Responsibilities:

Supplier, or other NEPOOL member which has entered into an agreement with Supplier, shall be required to include the load at each Account it serves, including losses, in its own-load dispatch at NEPOOL.

Mass. Electric shall normally report the previous day's hourly adjusted loads at each applicable Supplier Delivery Point to NEPOOL by 12:00 noon . This is the load which Supplier will be obligated to include in its own-load dispatch at NEPOOL and is the amount it was required to have delivered to the Supplier Delivery Point(s). NEPOOL will add this adjusted load to Supplier's other NEPOOL loads.

Delivery Point:

Supplier shall be obligated to deliver the capacity and energy actually used by each Account to a point or points on the NEP transmission system ("Supplier Delivery Point") where firm service is available. Supplier shall be obligated to arrange for and pay all costs associated with delivery of its capacity and energy to the Supplier Delivery Point(s).

NEP will transmit the power received to Mass. Electric and deliver it to the interconnection(s) between NEP system and Mass. Electric's system (Transmission Delivery

Points). This service will be provided to Mass. Electric by NEP under a transmission tariff on file at the Federal Energy Regulatory Commission.

Mass. Electric will provide local distribution service to deliver the power from the Transmission Delivery Points to the applicable Accounts (Customer Delivery Points).

Back-up Supply Obligations:

Since the load for each Account will be included in Supplier's own-load dispatch at NEPOOL, Supplier will be responsible for obtaining any back-up supply that it may need. This supply can be obtained from other supply sources or through service offered by NEPOOL to cover energy and/or capacity deficiencies.

Losses:

Supplier shall be responsible for supplying all losses on any applicable transmission system and local distribution system to meet the load requirements of each Account. The allocation of losses shall be as described in the NEPOOL Responsibilities section and elsewhere in these Terms and Conditions.

Service Disconnection Procedures:

Should the Customer fail to pay the full amount due to Mass. Electric for local distribution service, basic service, safety net service or standard offer service, Mass. Electric may disconnect the Customer pursuant to the current procedures for disconnection which apply to Customers of the applicable rate class. Mass. Electric will provide written notification to the Supplier five (5) business days prior to disconnection. Once disconnection occurs, supply to the Customer is no longer the obligation of the Supplier. Mass. Electric shall not be liable for any and all revenue losses to the Supplier for participants lost to any disconnection.

The Supplier may discontinue supply in conformance with the specific Customer/Supplier Contract. Suppliers will provide Mass. Electric with written notice of intent to discontinue supply five (5) or more business days prior to the Customer's scheduled meter read. Service by the Supplier will terminate upon the next scheduled meter read from the time of this written notice. Customers not physically disconnected from the local distribution system by Mass. Electric will become basic or safety net service Customers of Mass. Electric.

Distribution Service Interruptions:

Mass. Electric shall provide firm local distribution service to each Customer. In the event that the loading of the distribution system, or a portion thereof, must be reduced for safe and reliable operation, such reduction in loading will be proportionately allocated among all Customers whose load contributes to the need for the reduction when such proportional curtailments can be accommodated within acceptable operating practices.

Authorization to Release Customer Information:

Customer authorization is required for the release of all Customer specific data to Suppliers, including, but not limited to, Customer name, address, load and usage data.

Liability and Indemnification

To the fullest extent allowed by Law, the Company shall not be liable for any direct, special, indirect or consequential damages whatsoever under any theory of Law that is now or may in the future be in effect, including without limitation: contract, tort, strict liability, negligence or M.G.L. c. 93A, caused by interruption, abnormal voltage, discontinuance or reversal of energy delivered, circumstances beyond its immediate control, including but not limited to accidents, labor difficulties, actions of transmission services provider(s), Suppliers, public authorities, the failure to receive electricity from any Supplier(s), implementation of an emergency load reduction program, or the inability for any other reason to maintain uninterrupted and continuous deliveries.

APPENDIX A

I. Customer Usage Record Format: (Passthru Option)

This record layout reflects the Customer Usage information that will be forwarded to Supplier(s) on a daily basis. This daily transmission is to be completed by midnight of the next business day after MECO's cycle meter reads for individual Accounts for the Supplier. These records will be transmitted to all Suppliers, whose billing option is "Passthru".

Note: On days that there are no usage records to transmit, a header and a trailer record with a record count of zero will be transmitted.

A. Header Record (One Per Transmission):

•	Record Type	Pic X.	Type of Record (H - Header Record)
•	File Type	Pic X.	Type of File (U - Cust Usage File)
•	Distribution Co. ID	Pic $X(4)$.	MECO's Identifier (MECO)
•	Supplier ID	Pic X(4).	Suppliers Identifier
•	Bill Cycle Date	Pic 9(8).	Billing Cycle Date
•	Transmission Date	Pic 9(8).	File Transmission Date

B. Detail Record (Multiple Per Transmission):

•	Record Type	Pic X.	Type of Record (D - Detail Record)
•	File Type	Pic X.	Type of File (U - Cust Usage File)
•	Distribution Co. ID	Pic X(4).	MECO's Identifier (MECO)
•	Supplier ID	Pic X(4).	Suppliers Identifier
•	Option Code	Pic X.	Billing Option Code
•	Activity Code	Pic X.	Activity Code
•	Disco Acct Number	Pic X(20).	MECO Customer Account Number
•	Supplier Acct Number	Pic X(20).	Supplier Customer Account Number
•	Billing cycle number	Pic XX.	Billing cycle number
•	Disco Rate class Pic XXX	X. Distribu	ition Company's rate class
•	Current Read Date	Pic 9(8).	Current Read Date
•	Previous Read Date	Pic 9(8).	Previous Read Date
•	Peak KWH	Pic 9(9).	Peak Kilowatt Hour Usage
•	Ofpk KWH	Pic 9(9).	Off-Peak Kilowatt Hour Usage
•	Actual Pk KW	Pic 9(6)v9.	Actual peak Kilowatt Hours
•	Actual Pk KVA	Pic 9(6)v9.	Actual Peak KVA
•	Actual Ofpk KW Pic 9(6)	v9. Actual	Off-Peak Kilowatts
•	Actual Ofpk KVA	Pic 9(6)v9.	Actual Off-Peak KVA
•	Billing Demand	Pic S9(6)V9.	Billing Demand

C. Trailer Record (One Per Transmission):

•	Record Type	Pic X.	Type of Record (T - Trailer Record)
•	File Type	Pic X.	Type of File (U - Cust Usage File)
•	Distribution Co. ID	Pic X(4).	MECO's Identifier (MECO)
•	Supplier ID	Pic X(4).	Suppliers Identifier
•	Record Count	Pic 9(7).	Number Detail Records Transmitted

D. Field Definitions:

Record Type:

Single byte indicating type of record. Field is used on header, detail and trailer records. Valid values are:

H = Header record

D = Detail Record

T = Trailer Record

File Type:

Single byte indicating type of file being transmitted. Field is used on header, detail and trailer records. Valid values are:

B = Billing file

P = Payment file

U = Usage file

Distribution Co ID:

Distribution Company's identification number. This will be provided on all records. It will indicate the Distribution Company for the Customer's Account and the Company making the transmission. For Massachusetts Electric, the ID will be 'MECO'.

Supplier ID:

Supplier's identification number. This will be provided on all records. It will indicate the Supplier Company for the Customer's Account and the Supplier the transmission is intended for.

Bill Cycle Date:

Date field on the header record indicating the billing date used by the local Distribution company. The usage records will be transmitted by midnight of this day. Format of the field is: YYYYMMDD

Transmission Date:

Date field on the header record indicating date of transmission. Format of the field is: YYYYMMDD

Disco Account Number:

This will contain the Account number assigned by the local Distribution Company to an Account. If the Account number is changed due to a reroute this field would contain the new number. **Note**: This field may change at any time.

Supplier Acct Number:

This will contain the Account number assigned by the Supplier to an Account. As the Disco Account number may change at any time, Suppliers should utilize this field to identify their Customers.

Billing Cycle Number:

This is the current billing cycle for the Account assigned by the local Distribution Company. Similar to the Disco Account number, this field may change at any time.

Rate Class:

This will contain the Customer's local Distribution Company rate.

Current Read Date:

This will contain the current read date. This would either be the date the account was being billed to, or the date that the account was being canceled back to. The format for the field is: YYYYMMDD.

Previous Read Date:

This will contain the last read date. This date should be the same as the prior months new read date. The format for the field is YYYYMMDD.

Peak KWH:

Will contain the total Kilowatt Hour Usage amount for non time of use customers and the total peak Kilowatt Hour Usage amount for time of use customers.

Ofpk KWH:

Will contain the total off peak Kilowatt Hour Usage amount if applicable. Otherwise the field will contain zeroes.

Actual Pk KW:

This will contain the actual greatest peak measured in kilowatts during peak hours, if applicable. Otherwise the field will contain zeroes.

Actual Pk KVA:

This will contain the actual greatest peak measured in kilovolt-amperes during peak hours, if applicable. Otherwise the field will contain zeroes.

Actual Ofpk KW:

This will contain the actual greatest peak measured in kilowatts during off peak hours, if applicable. Otherwise the field will contain zeroes.

Actual Ofpk KVA:

This will contain the actual greatest peak measured in kilovolt-amperes during off peak hours, if applicable. Otherwise the field will contain zeroes.

Billing Demand:

This field if needed will contain the demand that was used to bill the account. This field is calculated depending on the rate. For a cancellation this will contain the demand being canceled. For a non demand rate this field will contain zeroes.

Note

Currently Massachusetts Electric tracks and processes usage at a component level by meter, i.e. peak and off peak for KW and KVA. A determination on how the demand will be billed by Suppliers is needed in order to supply them the necessary information. NEP anticipates receiving the different components from the various local Distribution companies.

Option Code:

This will contain the billing option for the Account. The valid codes are:

- 1 = Complete
- 2 = Passthru

Activity Code:

This will contain a code to indicate the type of billing that was performed on the Account. Valid codes are:

- 0 = Normal On cycle bill
- 1 = Cancellation
- 2 = Manual Bill

- 3 = Final Bill
- 4 = Off cycle bill
- 5 = No bill
- 6 = Estimated on cycle bill
- 7 = Estimated off cycle bill
- 8 = Late read/Late booked

Record Count:

This field is on the trailer record and will contain the total number of records transmitted. It will be used to verify that the correct number of records was received.

II. Customer Usage Record Format: (Complete Option)

This record layout reflects the Customer Usage information that will be forwarded to Supplier(s) on a daily basis. This daily transmission, to be completed by midnight of the same business day that the Account is billed, will correspond to MECO's cycle meter reads for individual Accounts for the Supplier. These records will be transmitted to all Suppliers, whose billing option is "Complete".

The expanded usage record will, in addition to the usage being billed, contain the calculated billing amounts for the current bill cycle, and if applicable, any outstanding Customer balances for each Account.

Note: On days that there are no usage records to transmit, a header and a trailer record with a record count of zero will be transmitted.

A. Header Record (One Per Transmission):

•	Record Type	Pic X.	Type of Record (H - Header Record)
•	File Type	Pic X.	Type of File (U - Cust Usage File)
•	Distribution Co. ID	Pic $X(4)$.	MECO's Identifier (MECO)
•	Supplier ID	Pic $X(4)$.	Suppliers Identifier
•	Bill Cycle Date	Pic 9(8).	Billing Cycle Date
•	Transmission Date	Pic 9(8).	File Transmission Date

B. Detail Record (Multiple Per Transmission):

•	Record Type	Pic X.	Type of Record (D - Detail Record)
•	File Type	Pic X.	Type of File (U - Cust Usage File)
•	Distribution Co. ID	Pic X(4).	MECO's Identifier (MECO)
•	Supplier ID	Pic X(4).	Suppliers Identifier
•	Option Code	Pic X.	Billing Option Code
•	Activity Code	Pic X.	Activity Code
•	Disco Acct Number	Pic X(20).	MECO Customer Account Number
•	Supplier Acct Number	Pic X(20).	Supplier Customer Account Number
•	Billing cycle number	Pic XX.	Billing cycle number
•	Disco Rare Class Pic XX	XX. Distrib	oution Company's rate class
•	Current Read Date	Pic 9(8).	Current Read Date
•	Previous Read Date	Pic 9(8).	Previous Read Date
•	Peak KWH	Pic 9(9).	Peak Kilowatt Hour Usage
•	Ofpk KWH	Pic 9(9).	Off-Peak Kilowatt Hour Usage
•	Actual Pk KW	Pic 9(6)v9.	Actual peak Kilowatt Hours

• Actual Pk KVA Pic 9(6)v9. Actual Peak KVA

•	Actual Ofpk KW	Pic 9(6)v9.	Actual Off-Peak Kilowatts
•	Actual Ofpk KVA	Pic 9(6)v9.	Actual Off-Peak KVA
•	Billing Demand	Pic S9(6)V9.	Billing Demand
•	Current Bill Amount	Pic S9(9)V99.	Current Bill Amount
•	Current Peak Amount	Pic S9(9)V99.	Current Peak Amount
•	Current Ofpk Amount	Pic S9(9)V99.	Current Ofpk Amount
•	Demand Charges	Pic S9(9)V99.	Demand Billing Charges
•	Customer Charge	Pic S9(9)V99.	Customer Charge
•	Sales tax	Pic S9(9)V99.	Sales tax
•	Arrears Interest	Pic S9(9)v99.	Arrears Interest
•	Supplier Arrears	Pic S9(9)V99.	Supplier Arrears
•	Total Bill Amount	Pic S9(9)V99.	Total Bill Amount

C. Trailer Record (One Per Transmission):

•	Record Type	Pic X.	Type of Record (T - Trailer Record)
•	File Type	Pic X.	Type of File (U - Cust Usage File)
•	Distribution Co. ID	Pic $X(4)$.	MECO's Identifier (MECO)
•	Supplier ID	Pic $X(4)$.	Suppliers Identifier
•	Record Count	Pic 9(7).	Number Detail Records Transmitted

D. Field Definitions:

Record Type:

Single byte indicating type of record. Field is used on header, detail and trailer records. Valid values are:

H = Header record

D = Detail Record

T = Trailer Record

File Type:

Single byte indicating type of file being transmitted. Field is used on header, detail and trailer records. Valid values are:

B = Billing file

P = Payment file

U = Usage file

Distribution Co ID:

Local Distribution Company's identification number. This will be provided on all records. It will indicate the local Distribution Company for the Customer's Account and the company making the transmission. For Massachusetts Electric, the ID will be 'MECO'.

Supplier ID:

Supplier's identification number. This will be provided on all records. It will indicate the Supplier Company for the Customer's Account and the Supplier the transmission is intended for.

Bill Cycle Date:

Date field on the header record indicating the billing date used by the local Distribution company. The usage records will be transmitted by midnight of this day. Format of the field is: YYYYMMDD

Transmission Date:

Date field on the header record indicating date of transmission. Format of the field is: YYYYMMDD

Disco Account Number:

This will contain the Account number assigned by the local Distribution Company to an Account. If the Account number is changed due to a reroute this field would contain the new number. **Note**: This field may change at any time.

Supplier Acct Number:

This will contain the Account number assigned by the Supplier to an Account. As the Disco account may change at any time due to reroutes, Suppliers should utilize this field to identify their Customers.

Billing Cycle Number:

This is the current billing cycle for the Account assigned by the Distribution Company. Similar to the Disco Account number, this field may change at any time as a result of a reroute.

Rate Class:

This will contain the Customer's Distribution Company rate class.

Current Read Date:

This will contain the current read date. This would either be the date the Account was being billed to, or the date that the Account was being canceled back to. The format for the field is: YYYYMMDD.

Previous Read Date:

This will contain the last read date. This date should be the same as the prior months current read date. The format for the field is YYYYMMDD.

Peak KWH:

Will contain the total Kilowatt Hour Usage amount for non time of use Customers and the total peak Kilowatt Hour Usage amount for time of use Customers.

Ofpk KWH:

Will contain the total off peak Kilowatt Hour Usage amount if applicable. Otherwise the field will contain zeroes.

Actual Pk KW:

This will contain the actual greatest peak measured in kilowatts during peak hours, if applicable. Otherwise the field will contain zeroes.

Actual Pk KVA:

This will contain the actual greatest peak measured in kilovolt-amperes during peak hours, if applicable. Otherwise the field will contain zeroes.

Actual Ofpk KW:

This will contain the actual greatest peak measured in kilowatts during off peak hours, if applicable. Otherwise the field will contain zeroes.

Actual Ofpk KVA:

This will contain the actual greatest peak measured in kilovolt-amperes during off peak hours, if applicable. Otherwise the field will contain zeroes.

Billing Demand:

This field if needed will contain the demand that was used to bill the Account. This field is calculated depending on the rate. For a cancellation this will contain the demand being canceled. For a non demand rate this field will contain zeroes.

Note: Currently Mass. Electric tracks and processes usage at a component level by meter, i.e. peak and off peak for KW and KVA. A determination on how the demand will be billed by suppliers is needed in order to supply them the necessary information. NEP anticipates receiving the different components from the various Distribution companies.

Option Code:

This will contain the billing option for the account. The valid codes are:

- 1 = Complete
- 2 = Passthru

Activity Code:

This will contain a code to indicate the type of billing that was performed on the account. Valid codes are:

- 0 = Normal On cycle actual bill
- 1 = Cancellation
- 2 = Manual Bill
- 3 = Final Bill
- 4 = Off cycle bill
- 5 = No bill
- 6 = Estimated on cycle bill
- 7 = Estimated off cycle
- 8 = Late read/Late booked

Current Bill Amount:

This will contain the total Supplier charges for the current bill. This is an accumulation of the following Supplier charges:

Total KWH Charges (Peak and Off peak)

Demand Charges

Customer Charge

Sales Tax

Arrears Interest

Current Peak Amount:

This will contain the total peak KWH Supplier charges. This will contain the total KWH charges for non time of use Customers, and the total peak KWH charges for time of use Customers

Current Ofpk Amount:

This will contain the total off peak KWH Supplier charges for a time of use Customer. Otherwise this field will contain zeros.

Demand Charges:

This field will contain the Supplier charges for the demand that was billed. This will be dependent on the Customer's rate. For non demand Customers this field will contain zeroes.

Customer Charge:

This field will contain any applicable supplier Customer charge. Otherwise this field will contain zeros.

Sales Tax:

This field will contain the sales tax applied on the Supplier charges for commercial Accounts. For Customers exempt from sales tax this field will contain zeros.

Arrears Interest:

This field will contain any arrears interest charged on supplier arrears. Otherwise this field will contain zeros.

Supplier Arrears:

This field will contain the total Supplier arrears amount. Arrears interest is not included in this field.

Total Bill Amount:

This field will contain the total Supplier charges billed. This is a total of:

Current Bill Amount

Supplier Arrears

Record Count:

This field is on the trailer record and will contain the total number of records transmitted. It will be used to verify that the correct number of records was received.

III. Customer Payment/Adjustment Record Format:

This record layout reflects the Supplier payments received by MECO. These records will be transmitted to those Suppliers who elect the *Complete* billing option. This daily transmission is to be completed by midnight of the same business day following receipt of payment at MECO's payment processing center, e.g., by midnight Wednesday following receipt on Monday.

This record layout also reflects the Supplier adjustments. These records will be transmitted to MECO Suppliers who elect the *Complete* billing option. This daily transmission is to be completed by noon of the next business day.

A. Header Record (One Per Transmission):

•	Record Type	Pic X.	Type of Record (H - Header Record)
•	File Type	Pic X.	Type of File (P - Cust Payment File)
•	Distribution Co. ID	Pic $X(4)$.	MECO's Identifier (MECO)
•	Supplier ID	Pic X(4).	Suppliers Identifier
•	Bill Cycle Date	Pic 9(8).	Billing Cycle Date
•	Transmission Date	Pic 9(8).	File Transmission Date
•	ACH Transfer Date	Pic 9(8).	ACH Transfer Date

B. Detail Record (Multiple Per Transmission):

• Record Type Pic X. Type of Record (D - Detail Record)

•	File Type	Pic X.	Type of File (P - Cust Payment File)
•	Distribution Co. ID	Pic $X(4)$.	MECO's Identifier (MECO)
•	Supplier ID	Pic X(4).	Suppliers Identifier
•	Disco Acct Number	Pic X(20).	MECO Customer Account Number
•	Supplier Acct Number	Pic X(20).	Supplier Customer Account Number
•	Type Code	Pic XX.	Pay/Adjustment Code (See Section D)
•	Type Description	Pic X(40).	Type Description
•	Payment/Bill Date	Pic 9(8).	Payment Posting Date
•	Pay/Adj Amount Pic 9(9))v99. Paymer	nt / Adjustment Amount
•	Filler	Pic x(10).	Filler of spaces

C. Trailer Record (One Per Transmission):

•	Record Type	Pic X.	Type of Record (T - Trailer Record)
•	File Type	Pic X.	Type of File (P - Cust Payment File)
•	Distribution Co. ID	Pic X(4).	MECO's Identifier (MECO)
•	Supplier ID	Pic X(4).	Suppliers Identifier
•	Record Count	Pic 9(7).	Number Detail Records Transmitted
•	Net Total Dollars	Pic S9(9)V99.	Total Dollars
•	Total supplier credits	Pic S9(9)V99.	Total credits
•	Total supplier debits	Pic S9(9)V99.	Total debits
•	Total ACH transfer	Pic S9(9)V99.	Total dollars transferred
•	Total amt due	Pic S9(9)V99.	Total amount due to DISCO

D. Field Definitions:

ACH Transfer Date:

This field will contain the date that the ACH transfer is expected to be deposited for the Distribution Company.

Payment/Adjustment Type Codes and Descriptions:

```
Type 01 = Payment Received from Customer
Type 02 = Transfer - Debit Adjustment
Type 03 = Transfer - Credit Adjustment
Type 04 = Bad Check - Debit Adjustment
Type 05 = Bad Check - Credit Adjustment
Type 06 = Arrears Interest - Credit Adjustment
Type 07 = Arrears Interest - Debit Adjustment
Type 08 = Flat Credit Adjustment
Type 09 = Supplier Write-Off - Supplier Changed
Type 10 = Supplier Write-Off - Account Written-Off (Account Charge-Off or
Purge)
```

The only adjustment that comes from the Supplier will be a Type Code 08 -Flat Credit Adjustment.

Payment/Bill Date:

This is the date the payment/adjustment was processed by the local distribution company. The format of the field is YYYYMMDD.

Pay/Adj Amount:

This field will the payment amount or the adjusted amount. This field is a numeric field and the amount should be processed in conjunction with the type code for debit or credits.

Net Total Dollars:

This field will contain the total of the Pay/Adj amount fields for the supplier. This will be used to verify that the correct total was received.

Total Supplier Credits:

This field will contain the total of all the cash payments, and cash supplier credit transactions.

Total Supplier Debits:

This field will contain the total of all the cash supplier debit transactions.

Total ACH transfer:

If the Total Supplier Credits is greater than the Total Supplier Debits, this field will contain the total of the supplier dollars that are being transmitted via ACH. Otherwise this field will contain zeros.

Total amount due:

If the Total Supplier Debits is greater than the Total Supplier Credits, this field will contain the total amount that is owed to the local Distribution Company. Otherwise this field will contain zeros.

IV. Cash Posting Sequence:

For those Suppliers electing the 'Complete' optional billing services, the following Account cash posting sequence will be in effect upon receipt of Customer payments:

A. MECO Cash Posting:

- 1) Rental Arrears
- 2) Arrears, 120 Days and Greater
- 3) Arrears, 90 Days
- 4) Arrears, 60 Days
- 5) Arrears, 30 Days
- 6) Rental Current
- 7) Net Current Balance
- 8) Miscellaneous Arrears
- 9) Miscellaneous Current
- 10) Charge Off Transfer Balance

Note: Following the MECO Cash Posting sequence as outlined above, remaining dollars will be credited to the Supplier as follows:

B. Supplier Cash Posting:

- 1) Arrears, 120 Days and Greater
- 2) Arrears, 90 Days
- 3) Arrears, 60 Days
- 4) Arrears, 30 Days

5) Net Current Balance

Note: Following the Supplier Cash Posting sequence as outlined above, any remaining dollars. i.e., credit balance, will be held and applied to the MECO Net Current Balance.

Attachment 1 Procedures Flowcharts

Note: Procedures flowcharts may be modified and/or additional procedures may be addressed over time.